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ORIGINAL LECTURES.

CLINICAL LECTURE ON OVARIAN TUMOR AND ON RECTO-VULVAR FISTULA.

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OVARIAN TUMOR.

GENTLEMEN,—The first case I have to show you is one that illustrates the difficulty of diagnosing the nature of abdominal tumors. The patient is a colored woman, 47 years of age, who has had five children, the youngest of whom was born twelve years ago. One year ago she noticed some enlargement of the abdomen, which has rapidly increased ever since, until now she presents herself with a tumor so great that the girth of her abdomen at the umbilicus is forty-seven and a half inches. Her menstruation was regular until last February, three months ago, when it ceased altogether. At the same time she has been losing flesh, and now has some oedema of the legs.

Now, ovarian tumors are very rare in colored women. Mr. Spencer Wells, who has performed more than a thousand operations for ovarian tumors, was recently in this country. While here he had occasion to examine an abdominal tumor in a colored woman, and declared his opinion that it was ovarian. Dr. Atlee, of this city, who was present, called his attention to the fact of the rarity of ovarian tumor in the race, which affords such opportunity of observation in America, and Mr. Wells made another and more careful examination. After this he concluded there was a fibro-cystic tumor of the uterus. This ultimately proved to be the correct diagnosis.

Now, in our case, we have a very large tumor. It gives marked fluctuation. And yet, when I come to tap it, I may be wholly unable to get any fluid, for the contents may be colloid. Again, this may be an effusion into the peritoneum, but it looks too much like a pregnant uterus for me to think that likely. It is too globular,—not flat, as the effusion into the peritoneal cavity usually is. On percussing over

the flanks I do not find resonance, but the dulness is much less marked than in front, so it is not likely this is a fluid free in the abdominal cavity.

I presume, then, that we have here a cystic tumor; and I mean to tap it. And I wish to tap it painlessly. To do this I take a piece of ice, put salt upon it, and then apply it to the skin, so as to freeze the part where I mean to puncture,—that is, in the linea alba, about midway between the symphysis pubis and the umbilicus.

While I wait let me tell you that, if this proves to be a fibro-cystic tumor of the uterus, there will be very great difficulty and danger in its removal. If, however, it is ovarian, the danger is not by any means so great. The cessation of the menses about a year ago makes the latter supposition seem more tenable.

Now I think we are ready, and I plunge a large aspirator needle straight in. The woman felt it, you see, but only a little, she says. The tube of the needle is now attached to this large jar, from which the air has been exhausted, and we look, when the cock is turned, to see the fluid descend into the jar. But not a particle comes. I said I did not think this fluid was colloid, but it now looks as if it were. We exhaust the air a little further, and out come a few sticky drops, like jelly. I am surprised, and cannot understand the marked impression of fluctuation which I got on palpating the tumor. This leads me to think we have an ovarian tumor here. Yet the diagnosis is not easy without examining microscopically the fluid obtained. When this is not done a mistake may easily occur. It has happened once to me, and I do not purpose to have it happen again; so I will have some of the fluid examined, and, if there are found in it the cells peculiar to ovarian tumor, I shall know what I have to deal with.

Our operation is now over; we have got scarcely any fluid, and it only remains to draw the trocar out and cover the puncture with a slip of adhesive plaster.

You might ask if there is any danger attending so trifling an operation. I used to think not, and would plunge a trocar in without hesitation. But I have learned a lesson. Only last week I had a case in which peritonitis followed this operation. I had to remove the cyst, and, when I opened the abdomen, out came a

lot of bloody water, and a large number of old clots. I have told you of a cyst I tapped from which a stream of blood flowed. In that case, had I used an aspirator I think I should have had internal hemorrhage.

Now let me show you how the needle is to be withdrawn. I press the sides of the puncture down and away as I withdraw it. If I had emptied the tumor and its wall were flaccid, I should pinch it up against the needle, so as to close up the opening as much as possible and prevent any fluid from getting into the peritoneal cavity.

Having sent the woman out of the room, I wish to tell you that I regret very much that I did not succeed in emptying that cyst. One reason is because its wall is very tense, and I am afraid, small as is the opening I made, that some of the contents will get out into the peritoneal cavity. And although I believe the acidity of such fluids has been much overrated, yet I know they do sometimes light up a peritonitis and give a great deal of trouble. Again, if I had succeeded in emptying the cyst it would have been from four to six weeks before it filled up again, and we should have had time to get the woman into better condition for operation than she is now. Further, when the operation came to be done it would be safer to carry out than with so tense an abdominal wall.*

RECTO-VULVAR FISTULA.

Here, gentlemen, is a very rare case. It is so rare that its existence has been denied by some gynecologists. But I do not see why it should not occur, and, indeed, much oftener than it does. We have already attempted to close this fistula up. I have had it injected with a saturated tincture of iodine, but this has not done much good.

On examining, we find an opening in the right labium majus, going into the lower bowel, and the question arises how we had best operate. With a man there is not usually much difficulty, but in a woman cutting might destroy the perineum, and so we cannot always do it. In the present case it is fortunate that the opening is on one side, and so I think we can effect its closure from the bottom by employing the elastic ligature. If this works well, it will heal up behind as fast as it is being cut out in front, and we shall not impair the integrity of the perineal body at all.

* An account of the removal of this tumor by abdominal section—when it proved to be a colloid cystic tumor of the ovary—will appear in a subsequent number of this journal.

This is the first true case of recto-vulvar fistula I have ever seen. She comes to us in good general health, but she finds such a lesion makes her repulsive to her husband, and she is also annoyed by a discharge of flatus through this opening.

Having tied up the elastic ligature, I shall have an opium suppository put at once into the rectum, so as to counteract the pain which the ligature will cause as soon as she comes out from the influence of the ether.

And now what shall be your rule in case of abscesses in the vulva or vagina? Open them as soon as you find pus. Open them on the mucous surface if you can, because then the resulting scar is concealed, and the cicatrix is softer and less apt to contract. You need not be afraid of hemorrhage if you use ordinary care. For even if you should have it, it is usually not hard to control.

In regard to styptics, let me say a word. I formerly used Monsel's solution, but I never do so now unless I am forced to it. It makes hard, dirty clots that hold like plaster of Paris when you want to get them away. When these break down they become offensive and dangerous to the patient. For this reason I think iron should not be used for post-partum hemorrhage. Besides all this, it contracts the parts so that you are debarred from further access to them. Lately I have used vinegar a great deal as a styptic, and like it very much. It is clean, and usually quite sufficient to control the hemorrhage in gynecological operations.†

ORIGINAL COMMUNICATIONS.

IS CANCER INOCULABLE?

BY J. L. SUESSEROTT, M.D.

THE above question suggested itself to me after contemplating a portion of the very able "Address in Hygiene" read by Richard A. Cleemann, M.D., before the Medical Society of the State of Pennsylvania at its thirtieth annual session, held at Chester, May, 1879.

That an entirely satisfactory solution of the grave question will be ever arrived at admits of doubt. One of our most eminent modern pathologists asserts that

† The patient was cured by this operation.—*REP.*

"carcinomata can rarely with adequate reason be attributed to external local causes, whilst it is very common for them to luxuriate in internal organs beyond the reach of palpable influence from without." Farther on the same author states that "the highest grades of cancer-crisis originate through infection,—that is, through the reception into the lymphatics, or more especially into the blood-vessels, of cancer-cells, or of cancer-blastema, of a lax, soft, semi-fluid character. The blastema is carried thither by imbibition, partly in the mere act of nutrition, partly with or without the cancer-cells, through the lymphatics or veins laid open by ulceration of the tumor, or, lastly, by the cancer penetrating into the canals of blood-vessels."* This, of course, implies a multiplication or reproduction of the disease in a subject already cancerous; but is it not possible to introduce these cancer germs by means of an impregnated blastema in the form of lymph that has been removed from a cancerous subject through channels that would be little suspected? I do not pretend to convey the idea that this supposed infection is as virulent, or that it is, as it were, constantly on the alert seeking whom it may destroy, as is the poison of syphilis; but may not the alarming increase of this dread malady be partly accounted for by the introduction of minute germs through the old and, we are glad to say, rapidly-disappearing method of "arm-to-arm vaccination"? When first introduced, these germs may possibly be insufficient to develop a decided cancerous crisis, but by the process of intermarriage of those thus affected, on the principle of duplication of the weakness of the two systems, the products of these marriages appear with an intensified predisposition in that direction, and by reduplication and further inoculation the disease in its pronounced type is fully developed. Lest some who have not given this matter a thought may imagine that the fact of the alarming increase of this malignant and fatal malady does not exist, permit me to quote from the able paper above referred to: "For seventy years the mortality from cancer in Philadelphia has been a little more than eleven deaths in one thousand of the mortality from all causes,—apparently not a large proportion; yet the sum of the

deaths from this disease during that period, when reckoned up, reaches an aggregate of above six thousand, or more than half the number of deaths from smallpox during that same time. This, however, is not the whole story. An extraordinary result is reached when we compare the death-rate of this terrible disease in the earlier years with that which obtains in later times. During the five years from 1807 to 1811 (inclusive) the proportion of deaths from cancer to the mortality from all causes was 4.5 per thousand, while in the period from 1872 to 1876 the ratio became 16.4. Think of it! an increase in sixty-five years of nearly four hundred per cent.! This ghastly malady, the clutch of which is certain death, gathers to itself (even making allowance for increase of population) four times as many victims as in the beginning of the century! But, you may exclaim, are the statistics reliable? It is not pretended that before the act of registration of births, marriages, and deaths, approved March 8, 1860, went into effect the mortality lists of Philadelphia were perfectly correct. Doubtless the records of many deaths failed to find their way to the registration office, but there is no reason to believe that the deaths from cancer especially escaped notice; it is more likely that the deficiencies were scattered through the whole list; so that by calculating from those returns the ratio of the yearly mortality from cancer to the general mortality—as we have done—we arrive at a result accurate enough for our purpose, notwithstanding the omissions of the early registration. The conclusion is sustained if we confine ourselves to the statistics of the years of reliable registration since (1860), though, from the proximity of the periods to be compared, the actual results obtained present a less striking picture. Making use now of a different ratio,—that of the number of deaths from cancer to the population living, by which we eliminate the errors incident to the employment of the total mortality as a standard, affected as this is by the varying meteorological conditions of different years and the fitful sway of epidemics,—we find, in the period from 1862 to 1866, a yearly average of 3.14 deaths to ten thousand of the population living, while in that from 1872 to 1876 the ratio was 3.92 per ten thousand, making an advance for the later years by this method also, now equalling twenty-

* Rokitsky's Path. Anat., vol. i. pp. 196, 197.

five per cent. If, as some suppose, the estimates of the population of Philadelphia for the years since the last census was taken—which were made according to the method used in the Bureau of Labor and Statistics—are too high, then the support will be still stronger, for the ratio for the later years will be even higher.

Another stone may be cast at my statistics. It may be objected that the greater precision of modern diagnosis places now in their true category morbid conditions which would formerly have been classed simply as tumors, ulcerations, strictures, or merely as diseases of various organs; and I confess that it seemed to me, at first sight, that this would fall with crushing weight upon my perhaps too hastily wrought structure. But I went over the lists again, counting and comparing the mortality for *tumors*, choosing the caption because I thought this term was the one most likely to cause confusion in the records of cancer. I ought to have found the mortality from tumors diminished as the years rolled on if death once attributed to them afterwards came to fall under the cause of death cancer. But the contrary was the result; the proportion of deaths from tumors increased as well as those from cancer. I did not go through the same process concerning the mortality from ulcerations and from strictures, but I made up my mind that the stone was a pebble after all, and my house stronger than one of glass; and I also reflected that in the fifteen years of accurate registration at least, from the earlier part of which to the close there had been an increase of twenty-five per cent. in the mortality from cancer, there has certainly not been a parallel advance in the refinement of diagnosis. I found, too, searching the records of London mortality (the models for the world), that they told the same story of the increased death-rate of cancer. In that city during thirty years (from 1845 to 1874) the rate advanced from 3.4 per ten thousand inhabitants living to 5.7 per ten thousand,—an increase of seventy per cent.

If, then, I have unhidden a grain of truth, need I pause to draw back the curtain from the hideous prospect to which it leads us? Four times as many smitten with cancer now as fell two generations ago, what might we expect for those who are to come two generations after?

This is a burning thought, which comes home to us, and which it is our business as hygienists to heed. In this extremity medicine has proved, so far, powerless. Sometimes the knife, in merciful mutilation, has prolonged a life, but the end has been the same,—agonizing death. Can we meet the danger? Unfortunately, the physiologist or pathologist has brought us no new clue by which we may go directly against the enemy. Whence he comes is as much a mystery as ever. But clinicians, in their careful histories of disease, have traced the taint of cancer back from one generation to another, and, establishing the active part which heredity plays in determining the disease, give us a vantage-ground upon which to try resistance. Inspired by this fact, shall we not say, as disciples in hygiene, to those inheriting the predisposition to cancer, "Marry not; or, at least, marry not together"? The intrinsic merit of the address so largely quoted from is sufficient excuse for its appropriation. But, in conclusion, let me add, is not this appalling increase of this one hideous disease within the last two generations enough to make us consider whether it is not possible that some modern practice upon the human system may not be in a measure responsible for a large proportion of it? And, inasmuch as no one thing could have exerted so active an influence as vaccination, should we not abandon now and forever the use of lymph procured from the human subject? The supply of bovine virus is taken from animals among whom the dread disease, cancer, as compared with the human family, is not of frequent occurrence; and, even if it were, there is not the same danger of condensing the poison by reduplication. But if danger is apprehended from this source, and vaccination is condemned *in toto*, let the edict go forth that "neat-kine" shall no longer be used as food, especially in the uncooked forms so commonly in use.

CHAMBERSBURG, PA., September 3, 1880.

COMPRESSION OF THE AORTA.—On June 25, says the *Lancet*, Mr. Richard Davy compressed the abdominal aorta by means of a metal lever introduced into the rectum in a case of excision of cancer of the uterus performed by Dr. Potter. The operation was almost entirely bloodless, and the pulsation in both femoral arteries was completely arrested. This procedure has not been followed by any untoward result.

DEATH FROM DIPHTHERITIC PARALYSIS.

BY D. WEBSTER PRENTISS, A.M., M.D.,
Washington, D.C.

THE following case presents some points of interest which, I think, are worthy of being made a matter of record:

F. S., a female child, aged 4 years, of consumptive family (mother's side); delicate constitution.

June 17, 1880, attacked with tonsillitis.

June 20, on examination of throat, found right tonsil covered with thick whitish-gray membrane; same commencing on left tonsil. High fever, quick pulse, and great depression. Prescribed—

R Acidi carbolici, gr. i;
Glycerinæ, gr. c.

Apply to throat with camel's-hair brush every two hours.

R Potassii chloratis, gr. iv;
Tinct. ferri chloridi, gr. viii;
Syr. aur. flor., gr. xv;
Aquæ, ad gr. lx.

M.—S. Teaspoonful every four hours.

R Spt. æth. nit., gr. xv;
Syr. limonis, gr. xv;
Liq. ammon. acet., ad gr. c.

M.—S. Dessertspoonful every four hours.

These two medicines to be taken two hours apart.

The false membrane ceased to spread from first application of carbolic acid solution, the patient improved, and by June 24 no membrane was visible, and the attendance ceased, with instructions to continue the iron mixture a few days longer and look out for symptoms of paralysis.

July 21, the parents first noticed failure of power in the legs, uncertainty in the gait, staggering, frequent falls, and dragging of the legs. This was followed by affection of the speech,—words indistinct, jumbled together, and with a sound as of "talking through the nose."

July 25 I was consulted at my office for the leg-paralysis, and ordered emulsion of cod-liver oil and tonic doses of strychnia dissolved in elixir of calisaya.

July 27, difficulty in swallowing added to other paralytic symptoms; food passes into larynx, causing strangling, and is regurgitated through the nose. Muscles of the neck are implicated; in certain positions the aid of the hands is required in moving the head. This is especially the case when the child is on her hands and knees, the mother being called to raise and support the head. The mother noticed a strange appearance of the eyes,—just what, she could not describe; but from her statements there was at times alternate dilatation and contraction of the pupils.

July 28, was again consulted at my office, on account of dysphagia. Medicine pre-

scribed on 25th had not been given. Insisted on the prescriptions, and directed if they could not be given by mouth to give by rectum.

About this time the strangling-spells became attended by attacks of dyspnœa. There was accumulation of secretion in the bronchial tubes, without the ability to expel it by coughing.

July 31 I was sent for at 1 A.M., on account of two violent attacks of dyspnœa, which threatened suffocation. Found her quiet, but greatly exhausted. No medicine had been taken, in consequence of the dysphagia and the great resistance made to its administration. Had taken but little food for five days, although complaining of hunger. Coarse bronchial râles abundant over whole of both lungs. Bowels constipated. Ordered castor oil enema, to be followed by nutrient enema of milk, beef-juice, and whisky.

July 31, 11 A.M.—Bowels moved from castor oil. Has retained nutrient enemata, and seems easier. Breathing spasmodic in inspiration. Bronchial râles unchanged. Treatment continued. Milk-punch by mouth if possible.

July 31, 8 P.M.—Semi-comatose. Breathing labored, with jerky inspiration. Surface cyanotic; eyes sunken; râles more abundant. Ordered—

R Ammon. carb., gr. iii;
Tinct. bellad., gr. iii;
Mucilaginis, gr. xvi;
Aquæ, gr. cxxviii.

M.—Tablespoonful every two hours by enema.

She rallied after these injections, and became conscious, but grew weaker and weaker, and died at 3 A.M. of August 1. No autopsy.

Remarks on Case.—The treatment prescribed for the diphtheria is given in detail in this case because it is the plan of treatment I have followed for a number of years and have every reason to be satisfied with. Of twenty-five or thirty cases thus treated there has not been a single death. In nearly every instance the membrane has ceased to spread upon commencing the use of the carbolic acid. In children sufficiently old to use the steam atomizer, and in adults, I make use of the following:

R Acidi carbolici, { equal parts.
Glycerinæ, }

Fifteen drops in an ounce of water every two hours by inhalation.

In younger children the treatment used in the case here reported has been followed. In one instance only did the membrane extend to the nasal passages, and in one only also did it extend to the larynx. This latter case was an infant of sixteen months, who recovered after twice

expelling the false membrane in a complete cast of the trachea under the action of turpeth mineral given in 0.12 (gr. ij) doses.

The application of carbolic acid solution, whether by brush or atomizer, is soothing to the throat and grateful to the patient. It has the advantage, besides, of being a powerful antiseptic, correcting the fetor and destroying the contagion of the disease. That diphtheria is principally contagious through the medium of the throat discharges there can be little doubt. Since using this treatment systematically I have not seen an instance in which the disease was propagated from a case so treated. As to the mortality, that may be a coincidence, for the cases were all sporadic ones. But a sufficient number of deaths from diphtheria appear in the mortuary reports of the District of Columbia during the same period to make the success at least worthy of remark.

The paralysis in this case developed four weeks after the diphtheria. It was undoubtedly the cause of death. The mode of death was by asphyxia,—the asphyxia due to paralysis of respiration, inability to expectorate, accumulation of secretion in the bronchial tubes, and, finally, cedema of the lungs. Upon the hypothesis that the paralysis was affecting the respiratory centre at the base of the brain, the carbonate of ammonia and tincture of belladonna were ordered by enema. The temporary effect of this treatment was marked, but the little patient gradually sank from exhaustion.

SOME THOUGHTS ON RHUS-POISONING.

BY W. R. D. BLACKWOOD, M.D.

THE subject of dermic poisoning by the *Rhus* family is one of great interest, not only to the patient, but also to the physician, from the severity of the symptoms in many cases, and from the intractable nature of the malady. Having been a personal sufferer for the fourth time in as many years, I can appreciate the gravity of the subject, and it is one of more importance than is generally supposed. In this part of the country the source of dermic poisoning is usually confined to three plants of the same natural order (*Anacardiaceæ*)

and sexual system (*Pentandria trigynia*). The two more important varieties are the *Rhus toxicodendron*, or poison-oak, and the *Rhus radicans*, or poison-ivy. The *Rhus venenata*, or poison-sumach, is, though not so common, very poisonous to many persons. The most virulent species, however,—the *Rhus pumilum*,—is fortunately not found in the Northern States, or cases would be largely multiplied. Irritating effects are occasionally encountered through handling other plants, but the results are so transitory and mild as to exclude them from notice. The poisonous principle in the plant is probably an extremely volatile one, as undoubted instances are on record of toxic effect produced without absolute contact: in fact, persons are not unfrequently found who are affected during the hotter months should they pass within half a dozen feet or more of the plant with the wind blowing towards them from the *rhus*. The period of greatest activity is during the flowering season,—from May to October,—but the effect may be produced in some cases at any period, even in winter. Susceptibility to the poison varies in different individuals, and in the same person at different times, probably being dependent on the condition of general health. For many years I was able to handle any variety of *rhus* with impunity; now the slightest touch will produce decided toxic results. The symptoms after exposure are at first slight but rapidly-increasing itching, with erythematous blush, running, after some hours, into an erysipelatous efflorescence, and in from twelve to twenty-four hours characteristic pearly or herpetic vesicles appear and multiply according to the severity of the attack. A decided febrile condition accompanies the dermic phenomena, which is usually overlooked by physicians who disregard the use of "instruments of precision." The itching as the disorder progresses becomes more pronounced, and is at times intolerable, leading the sufferer to scratch or rub the parts affected, with the invariable result of increasing the pain and vesication alike.

The parts most frequently attacked are those most exposed,—the hands, arms, and face. The back of the hands and fingers suffers more than the palmar or lateral surfaces, especially with reference to the vesicles. Towards the close of the attack scattered vesicles occur on the palm, but

not to any great extent ; vesication is not so decided upon the trunk as it is on the extremities, the eruption partaking more of the erysipelatous type. Reflex irritation, by inciting friction at parts as yet apparently unaffected, transfers the disorder to that locality. That the transfer is not merely inoculation by the finger-nails in cases which I have carefully watched is proved by allowing the scratching to be done by a person not affected, yet the herpes will be produced in the affected person on apparently healthy parts of the body if the experiment be made during the height of the disease. From this and other points, which cannot be satisfactorily noted in brief, I believe the disease runs a regular constitutional course of from seven to ten days, terminating by desquamation, and treatment has at best but little effect, probably only modifying the severity, but hardly cutting it short. Many agents have been recommended as curative, yet they are apparently of more use in occupying the attention of the patient than of actual service as therapeutic remedies. Personally and with patients I have exhausted the list of the alkalies ammonia, soda, and potassa, the sulphites and bisulphites, solutions of bromine, iodine, carbolic acid, permanganate of potassium, saturated infusions and tinctures of serpentaria and lobelia, stale beer, milk, and numerous ointments, official and extemporaneous, without real benefit. Sweet spirit of nitre has been suggested, but my experience with it is not sufficient to report on as yet. It does not, however, appear to possess value. I am told, also, that earth is useful and is commonly employed in the country ; but, although I spent several years in the Southern States, during and after the war, and have seen very much of extremely severe poisoning, such as prevails in the Carolinas, Georgia, and Alabama, I have never seen the article used. The favorite remedies there are decoctions of oak-bark and witch-hazel, neither of which ever does any good to my knowledge.

After a good opportunity to watch and study the disease in my own case, I have found the best method of treatment to be a light saline in the morning, the Seidlitz mixture, or Hathorn Saratoga water, with, if needed, from two to five drops of aconite tincture, and followed towards noon by from three to ten grains of cinchonidia or quinia sulphate without any acid, and a

full dose of morphia at bedtime. To allay the distressing torment and itching, *lime-water* is beyond doubt at once the simplest and the best local application. A lump of lime the size of a lemon in two quarts of water is sufficiently strong, and the parts should be thoroughly bathed, the mixture being well stirred up each time it is used. Care must be taken not to get the wash into the eyes if the face be affected. It is the better plan to wet the parts repeatedly, allowing them to dry somewhat, rather than to keep wet cloths on, as is generally done ; but where the trunk is largely affected the underclothing may be kept wet, and there is no danger of contracting cold when this is done, if ordinary care as to exposure to draughts be observed. Both galvanism and faradic electricity are remarkably soothing here, as they are in other herpetic disorders,—the common and painful “shingles,” for example. I have whilst applying either current to one hand had perfect freedom from painful itching, the other hand being extremely troublesome if not included in the circuit. Mild currents suffice, and the longer the application the more extended the relief afterwards. With galvanism the current should not be interrupted.

After exposure to the poison and before its symptoms manifest themselves, contact with other persons will affect them also. In two instances I have been the means of conveying the poison to patients, not knowing myself to be affected at the time. The first was that of a lady with a Colles fracture, and she suffered more from the herpes than from her surgical injury, as she repeatedly informed me both then and since. The next was a gynæcological case, and she was no better satisfied than the other. During the attack which I have just recovered from, I had the unique experience (to myself) of sitting beside an obstetric case and *leaving the entire conduct of the case to nature*, simply touching the umbilical cord whilst tying and cutting it, but neither examining nor assisting either the performer or her nurse. She did well, and so did the baby. How far contact with others will act after the skin is decidedly affected I do not yet know, but I have recently made some experiments in that direction which so far exhibit negative results.

246 NORTH TWENTIETH STREET.

THE ACTION OF STRYCHNINE ON THE SENSORY NERVES.

BY B. F. LAUTENBACH, M.D.

ALL the experiments alluded to in the following paper were made in February and March, 1879. Since then I have, for the purpose of convincing my professional friends, occasionally repeated the experiments with success. Frogs of the *R. temporaria* var. and the *R. esculenta* var. were the only animals employed. In all the animals the brain was destroyed before the experiment was commenced.

RESULTS OF THE FIRST SERIES OF EXPERIMENTS.

The circulation is cut off by a ligature at the thigh of one posterior leg.

Curarization. Movements cease in all the legs but the ligatured one.

A strong solution of strychnine is injected into the lymph-sac of the back.

Tetanus in the ligatured leg; the rest are quiet.

Touching any part of the skin produces tetanus.

Acids, the reducing-flame, and extreme pressure fail to produce tetanus from the non-ligatured parts of the animal.

Acids, the reducing-flame, pressure, as well as touch, produce tetanus from the ligatured leg.

RESULTS OF THE SECOND SERIES OF EXPERIMENTS.

The circulation is cut off in one posterior leg at the thigh.

Strychnine by the back. Early in the poisoning tetanus results from all parts of the skin by touching, pinching, burning; from acids and from electricity.

Later in the poisoning all the agents still produce tetanus when applied to the skin of the ligatured leg. Only touch has this effect from the rest of the body. Succussions, however, always produce tetanus.

Later still in the poisoning touch only will produce tetanus from the ligatured leg.

RESULTS OF THE THIRD SERIES OF EXPERIMENTS.

Strychnized a number of frogs, having previously exposed the various mucous membranes.

Touching these membranes produces reflexes without producing tetanus. Sometimes the reflex produces leg-succussion and tetanus.

Pinching, burning, acids, and electricity, all can produce reflexes in the strychnized frog, but they never produce tetanus.

RESULTS OF THE FOURTH SERIES OF EXPERIMENTS.

A posterior leg of a frog is so tied as to prevent any blood from entering or leaving it. A solution of strychnine is then injected under the skin of the tied leg. After some time the tactile sensibility is found to be increased, while the sensibility to pressure, to heat, to acids, and to electricity is abolished. Motility is at this time unaffected in the ligatured leg.

Later on, both the sensibility to touch and the motility disappear in the tied leg.

CONCLUSIONS.

Two very important conclusions can be drawn from the above:

1. *That the sensibility to touch is conveyed to centres by other channels than the other forms of sensibility.*

2. *That a physiological difference exists between motor and sensory nerves.*

In the fourth series of experiments the animal moved the poisoned limb, which was without sensibility, just as well as it did the non-poisoned legs.

TRANSLATIONS.

COLD TUBERCULOUS ABSCESSSES OF THE CELLULAR TISSUE.—At a recent meeting of the Société de Chirurgie (*Le Reveil Méd.*, vol. i., 1880, p. 48) M. Lannelongue read a communication upon the subject of "Cold Tuberculous Abscesses of the Cellular Tissue," purulent collections having all the characters of cold abscesses, the origin of which should be referred to a tuberculous product of the cellular tissue. The abscess, in fact, is only a secondary circumstance in the local evolution of the primitive tuberculous deposit; the tubercle is the primitive, the essential lesion. Many authors have described this variety of abscess under very different names. Thus, M. Vidal, at the Hôpital Saint-Louis, has called them *scrofulous gummata*; Bazin, *molluscum tuberculosum*; Hunter, *circumscribed tumors*. The merit of having demonstrated the tuberculous nature of *scrofulous gummata* belongs to MM. Brissaud and Josias, who have published a conscientious study in the *Revue Mensuelle de Méde-*

cine et de Chirurgie (November and December, 1879), and who have established the primitive seat of the tuberculous deposit, not in the skin, but beneath it.

The observations of M. Lannelongue confirm and explain the propositions of MM. Josias and Brissaud. Besides the tuberculous abscesses which are developed in the neighborhood of the skin, and which owe the appellation "scrofulous gummata" to their peculiar physiognomy, there are recognized in localities some distance from the skin purulent collections which have no resemblance to gummata or to cutaneous affections, but which, by their development and their exterior character, should be considered as veritable cold abscesses. These collections appear frequently in the course of chronic affections of the bones; they are not, however, symptomatic of these diseases, since they are seated at some distance, entirely independent of the osseous lesions; they are found on the forearm or the arm, while the lesion occupies a phalanx or a metacarpal bone; it may even happen that, the upper or lower limb being affected, the abscess may be developed upon another healthy member or on the trunk; but, on the other hand, they may be observed entirely apart from any osseous lesion. Hence the necessity of distinguishing, as M. Lannelongue has done, between tuberculous abscesses appearing in the course of chronic osseous affections and simple tuberculous abscesses.

The pathological anatomy of these abscesses can easily be ascertained in the living. Making use of an Esmarch's bandage when the lesion is situated on one of the limbs, M. Lannelongue proceeds to make a regular dissection of the sac, examining into its peculiarities. The abscess is limited by a pyogenic membrane becoming organized originally around the tubercular deposit.

M. Lannelongue generally treats cold tuberculous abscesses by means of a large incision, followed by irrigation with five per cent. carbolic acid solution, and maintains the wound in an open condition by means of a large drainage-tube. This method he applies to "abscesses by congestion,"—that is to say, to those which are symptomatic of osseous lesion. The after-results of this intervention are in general without complication. If the osseous affection is cured or in the way of

being cured, the sac becomes reduced to a sinus, which closes promptly; in the contrary case there remains a fistula, the duration of which is that of the bony disease itself. The reading of M. Lannelongue's paper was followed by a very animated discussion, in which a number of distinguished surgeons took part.

SUPPOSITORIES OF ERGOTIN.—At a recent meeting of the Société de Thérapeutique (*Bull. Gén. de Thérap.*, vol. ii., 1880, p. 43) M. Dujardin Beaumetz stated that, following the example of a Belgian physician, he had attempted the employment of ergotin in suppositories to combat the metrorrhagia of uterine fibromata. These suppositories contained fifty centigrammes (eight grains) of ergotin,—that is to say, about five times the amount used in hypodermic injection. He had obtained excellent results in two cases, which had been cured in the first after two applications, in the second after three applications.

In the discussion following, M. Ferrand said he also had employed these suppositories in studying the influence of ergotin on hemorrhoids. One patient, among others, had been relieved of a persistent hemorrhoidal flux after the employment of eight or ten suppositories containing twenty-five centigrammes of extract of ergot. This patient had had no return of the flux after more than a month.

M. Vidal said he also had used these suppositories in the treatment of rectal prolapse. He was accustomed to use suppositories containing fifty centigrammes to a gramme of ergotin. The effect obtained had not been as satisfactory as in using hypodermic injections; besides which, the patients complained of a very painful burning sensation in the neighborhood of the anus.

M. Ferrand said the dose was not without importance, because of the great difference of sensibility which exists between the mucous membrane of the stomach and that of the rectum: thus, saline enemata which caused energetic and painful contractions of the intestines produced no such effect when introduced into the stomach. In the patient suffering with hemorrhoids, whose case he had reported last year, he had employed hypodermic injections of ergotin after having been obliged to give up suppositories of tannin, which had been badly borne.

M. Montard Martin believed that there

existed an undoubted difference between the stomach and the rectum with regard to their relative sensibility; besides, the intestinal mucous membrane absorbs more easily, rendering it necessary to use smaller doses than by the mouth. The example chosen by M. Ferrand was ill chosen, because the saline solution employed as an emetic also excites the gastric mucous membrane greatly; but chloral, so well supported by the stomach, often causes severe pain when given in enemata.

M. Dujardin Beaumetz thought that suppositories of ergotin were to be recommended as useful in uterine fibroid. They did not present the same danger as the parenchymatous injection of ergotin in solution into the uterus, which is sometimes followed by fatal peritonitis. The formula for the suppositories might be fixed, for example, as ergotin fifty centigrammes, ol. theobromæ five grammes.

M. Ferrand thought that if these suppositories gave pain they might be reduced in strength and repeated more frequently.

M. Blondeau had employed similar suppositories in a case of retention of urine, and had obtained good results.

RESTORATION OF THE HAND AFTER COMPLETE SEPARATION FROM THE ARM.—Dr. L. L. Stanton, of Tarborough, North Carolina, reports the following remarkable case. A girl of eleven severed her hand from the arm with an axe, the cut passing from the styloid process diagonally across the trapezium, passing through the scaphoid bone and posterior annular ligament, dividing all the muscles, bones, and blood-vessels, and completely separating the hand from the arm, except a small portion of skin, below the articulation with the ulna; the hand was hanging at right angles with the arm when seen by the doctor, half an hour after the accident. He proceeded carefully to replace the hand, which was held securely in position with silver-wire sutures and adhesive plaster. The hand and arm were secured upon a broad splint, and kept warm by being wrapped in hot flannel cloths. Twelve hours afterwards the hand was very much swollen; no sensation or pulsation could be detected, nor had she complained of any pain, but rested quietly during the night. By the third day pulsation could plainly be felt in the hand; it had changed color, and looked as if it could be saved. From that time the patient did not have a bad symp-

tom, nor was there any suppuration or secretion of any kind; the wound healed entirely by first intention. The sutures were removed upon the fourteenth day, and afterwards she carried the hand in a sling, and when the case was reported (three months after the accident) was able to extend the fingers and grasp with nearly the usual strength. There was no ankylosis of the wrist-joint, as was expected.—*North Carolina Medical Journal*; from *St. Louis Courier of Medicine*, June, 1880.

TREATMENT OF CANCER OF THE UTERUS BY CAUTERIZATION WITH CHLORIDE OF ZINC.—Dr. Lejeune (*Thèse de Paris*, analyzed in *Bull. Gén. de Thérap.*, vol. ii., 1880, p. 45), having observed in the service of M. Alphonse Guérin the good effects obtained by the use of chloride of zinc in the treatment of cancer of the uterus, gives the following directions for its employment:

The cervix being brought into the field of the speculum, a small cone of Canquoin's paste, of sufficient length to reach to the cervical orifice, is introduced into the cavity of the neck, if it is feared that the disease is about to extend up into the interior. The cone being held in by a plug, a bit of charpie is placed in the posterior cul-de-sac, to protect the vaginal mucous membrane in case of leakage. Then the vaginal cavity is filled with another tampon of cotton or charpie sufficiently large to keep the cone of Canquoin's paste in place. The patient is then placed in bed. This last procedure is indispensable, to prevent the displacement of the cone, which is extremely apt to take place from the movements of walking. It is even better to confine the patient to bed for some days after the removal of the paste.

M. Lejeune's conclusions are as follows:

1. Cancer limited to the cervix uteri may be advantageously treated by means of the paste of chloride of zinc.
2. The destruction of the disease is as complete as is obtained by amputation of the cervix, and the dangers of this procedure are entirely avoided.
3. The cones may be buried deeply in the remote parts of the cervix, avoiding healthy parts, and coming into contact only with those which are diseased, and which it might be dangerous to attack by any other means.
4. When the disease is so far advanced that it is hopeless to attempt to remove it, the use

of chloride of zinc is advantageous in reducing fungosities and in combating hemorrhages. 5. This treatment is well supported by patients, it is easy of application, and may be taken to any part of the world.

CHLORATE OF POTASSIUM IN EPITHELIOMA—SULPHUR IN CHRONIC SCIATICA—THE ACTIVE PRINCIPLES OF TOBACCO—DIPHTHERITIC PARALYSIS.—At a recent meeting of the Société de Médecine Pratique (*La France Méd.*, 1880, p. 452) M. Dehenne read a paper on "The Treatment of Superficial Epithelioma of the Face by Chlorate of Potassium," in which he described that form of the disease which is chronic, slow, without ganglionic engorgement, superficial, and ulcerated, as the form in which this treatment is beneficial. He uses topically a ten-per-cent. solution.

M. Duchesne's method in sciatica, detailed to the Society, is simply covering the inside of the stockings with powdered sulphur. He is quite successful with this method, which is worthy of trial.

A letter from M. Le Bon announces that after long research he has obtained from tobacco-smoke (1) a notable quantity of prussic acid; (2) a new alkaloid of very agreeable odor, but as poisonous as nicotine. The fiftieth part of a drop is sufficient to cause paralysis and death.

M. Carré read a number of cases of paralysis following diphtheria, among others a curious case where, complicated fracture having occurred, amputation of the analgesic arm was performed without pain.

RADICAL CURE OF HYDROCELE.—Dr. Bernard Bartow (*Buffalo Med. and Surg. Jour.*, July, 1880) describes the following operation for the so-called "radical" cure of hydrocele, which he has employed in two instances with such satisfactory results as to lead him to believe there are some points of value in the method, and particularly in its application to cases which have resisted the means ordinarily employed for the relief of this disease. The operation consists of an incision from three to four inches in length in the scrotum, in the centre of the hydrocele tumor, extending through the scrotal subcutaneous tissues until the sac is exposed. The loose connective tissue is then separated from the sac to the extent of about an inch either side of the line of the incision, exposing about one-third the circumference

of the tumor; the distended sac protruding into the wound renders this last step very easy of accomplishment. Into the most depending part of the tumor thus exposed a fine trocar and canula is introduced, and the fluid is drawn off, the entire wound being left to close by granulation. It is intended that air shall not be admitted into the sac, and it is preferable to make the incision with antiseptic precautions, and to continue them during its subsequent treatment.

THE DIABETOMETER.—A method for the accurate and easy estimation of the quantity of sugar contained in a given specimen of diabetic urine is very desirable. M. Yvon, in the *Bulletin Général de Thérapeutique* for July 16, figures and describes an instrument which seems to fulfil all the indications, and if accurate should prove a boon to the practical physician and should certainly find a place in all large hospitals. It consists essentially of a glass tube, intended to hold the urine to be used, and which is supported horizontally on a stand. In the end of this nearest the source of light are placed, first, a reservoir for bicarbonate of potassium, then a polarizer. At the other end of the glass tube is a Nichols prism, and then a pair of lenses to focus its ray of light on the eye. The Nichols prism is made to rotate by means of a milled head graduated so as to express the richness of sugar in grammes to the litre of urine.

ACTION OF QUININE, DIGITALINE, AND ATROPINE COMBINED.—Dr. Guido Cavazzani, in an article on this subject, of which an abstract is given in *La France Médicale* of June 26, concludes as follows:

1. Atropine and digitaline are antagonistic: the first tonifies the terminal vessels and paralyzes the heart, the latter produces the opposite effect.

2. These two medicines when associated cause considerable slowing of the ventricular contractions of the heart, with a much less marked decrease of the auricular contractions.

3. Quinine and digitaline associated decrease reciprocally their force of action.

4. Quinine and atropine neutralize each other as to their action upon the heart.

5. These three medicines given alone may bring on a condition of collapse, which in the case of quinine is due to ischæmia of the heart, in digitaline to its tetanization, and in atropine to asthenia.

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, SEPTEMBER 11, 1880.

EDITORIAL.

THE NORTH WOODS.

HOME from the North Woods,—from 50° to 100° Fahr. in forty-eight hours; assistant in charge of the *Times* driven out of town by sickness due to the heat; current number of the journal woefully behindhand in its preparation; printer's devil gasping out, after his Tannerian fast, "Copy, copy!" With what shall he be filled? Perhaps in this strait some few fresh notes from recent experience may be neither uninteresting nor un instructive to our readers, and serve to still the stomach of the unfortunate devil.

The fifth editorial trip to the wilderness has strengthened the previously strong conviction that the woods afford to the overworked city man the most thorough and complete rest that can be found, provided always that there is some inborn sympathy between the man and nature in its original purity and freshness. The alteration of habits, of scene, of all that makes up life, is as profound as possible. From the reeking hot-beds of civilization to the calm, cool barbarism of the wilderness is the extreme of change. Then, again, the fact that the world is so far behind causes it to fade from the mental vision, and to be forgotten. When communication is not possible, care is apt to cease. Few dream of the tempest that may be raging five hundred miles away unheard.

The woods, too, are most flexible in their nature, capable of adapting themselves to the varied types of humanity. The active temperament finds in them a soul as busy as the day is long,—multitudinous activities that fill every moment

of time. So soon as the cold spring-water has washed away the traces of the night, breakfast claims attention; then fishing-tackle, rifles, lunch, and multitudinous preparations for the day's hunt or travel; then the effort intensified by the fact that the quality of the late dinner or supper depends upon the success; then wood to be cut, supper to be made ready, campfires to build, and, as the flickering shadows deepen with the night, results achieved and plans for the future to be discussed. To the lotos-eater the soul of the woods is a perennial calm. The hammock swings in the cool shade; the woods offer soft couches of moss and leaves; the silence woos to rest, and the dreamer dreams on, whilst guides prepare all that nature needs.

It is not, however, of the pleasures of the woods that we wish to write. He who has in his heart nothing of the vagabond, who has not envied on the summer day the tramp lolling in the country lane, will never fully comprehend the compensation for working eleven months upon the treadmill that is to be found in one month of life so free, so joyful, so full of satisfaction, as is that of the wanderer in the North Woods. But to those in whose veins the blood of old Norsemen or semi-savage Saxon still tingles a few facts are offered.

Probably there are few professional men in North American cities who do not yearly feel as a privation of the summer the prolonged separation from their families during the hot months, and who do not have some tendency to share the exile of the unfortunate mother and children during the summer vacation. To those whose souls have wearied with the utter dreariness of Atlantic City, of a country farm-house, or any other of the ordinary summer prisons which men do scatter to or congregate in, we want to say that we have tested taking the whole family to the North Woods, and found it to work most admirably. The power of the child to resist hardships is

certainly less than that of the adult, but in properly-regulated camping out there are no exposures worthy of being called hardships, and the minor ills are less apt to afflict the child than the adult. A bed of boughs is better than the beds in some watering-places, but many adults find it rather hard, whilst the child seems never to notice that it is different from what it has been accustomed to. From the cold by a sufficiency of bed-clothing and *flannel* body-clothing the child must be shielded during the night, and it will sleep most peacefully. During the day it will find an abundance of amusement, whilst all the time it is bathed in the good influences of air and sound hygienic surroundings.

The food question for the adult in the wilderness is a serious one, but for the child it is vital. No child under three or four years old should be taken into the woods. We have seen very serious consequences from this, for reasons most obvious. Milk and its derivatives are of civilization, and those things which are fit for the very young stomach grow not in the Adirondacks or the far north Canadas. Even for the older child, however, much salt food is not suitable; and no one should take a family where game is not abundant. Given sunny weather, venison and trout, good bread, butter, potatoes, buckwheat-cakes—oreven well-made “slap-jacks”—and maple syrup, and the child will grow and strengthen in the woods, even as did Antæus of old when his mother Earth nursed him in her lap.

LEADING ARTICLES.

THE MEDICAL COLLEGE OF JAPAN.

IN 1878 the medical college at Tokio was transferred from the home department to the educational department, and thus became a part of the national organization for culture and training. It is now located in the new buildings in Kaga Ya-

shiki, having well-arranged lecture-rooms, laboratories, an operating amphitheatre, a commodious and modern-modelled hospital, and rooms and space for an extensive out-patient department for clinical purposes. In a very large building, formerly occupied by the daimio's retainers, are rooms for lectures and recitations of the large preparatory and Japanese medical classes.

The “I-Gaku-Bu,” or medical school, is divided into two departments: (1) preparatory; (2) special or advanced course. To complete the full course five years are required in each department. The language of the school and hospital is German. As a knowledge of the Western sciences is essential to the proper understanding of the principles of modern medicine, as there are no fitting schools throughout the empire, and as the need of educated medical men is most urgent, the preparatory department has been established. Students from fourteen to twenty years of age who have taken a full course in Japanese and Chinese in the district schools are eligible. They are instructed in arithmetic, algebra, and geometry; in zoölogy, botany, and Latin, the latter branch giving the students more trouble than either of the other studies. They commence German, and study it through the entire medical course. Each year written examinations are held. Each student is required to attain a certain standard in all branches before he can be advanced.

To enter upon the special course each candidate must have passed in the preparatory school or must take the written entrance examination. In this department all instruction is in the German language. It covers a period of five years. The course is gradual, methodical, and not unlike that pursued at Harvard. A certain standard must be attained in order to enter the next class. Class examinations are held annually. At the final and state examination in order to take the degree of I-Gaku-Shi (conferred first in 1879), the candidate must satisfy the faculty and the government commission of proficiency in *all* branches studied during his course. Instruction is imparted by lectures, text-book recitations, clinical lectures, and clinical work in the hospital and out-patient department. Owing to the present difficulty of obtaining material and the infrequency of autopsies, only the advanced students

pursue practical anatomy; the majority are instructed from diagrams, charts, and models of *papier-maché* and plaster. (At the laboratory have been made nearly fifty fac-similes of French manikins, which have been distributed to all the hospital schools, for each hospital has its classes, in all parts of the empire.) There is no course in surgery or obstetrics on the cadaver. At present, on account of the large number of students and the limited facilities, but little practical work is done in chemistry, physics, physiology, or pharmacy. According to the last annual report, there were in the college hospital three hundred and eighty-eight male and ninety-two female patients, and upwards of four thousand five hundred came to the out-door patient department. To all advanced students cases were assigned in the wards to be followed through their entire treatment. Each student is required to present a complete history of the progress, treatment, and result of his case, which is submitted to and criticised by the clinical professor. At the same time nearly five hundred out-door patients were placed in charge of the students, under the supervision of the doctor on duty. The practice of obstetrics in this country is exclusively in the hands of midwives, called *samba-san*. All women who now adopt this calling are required by the government to be upwards of eighteen years of age, to have an elementary knowledge of pelvic anatomy, physiology, and of normal labor, and to have had a certain amount of practical work under a licensed midwife. A school for such instruction has been established in Tokio, and at most of the national hospitals.

The medical library has upwards of nine thousand volumes in the German language. (This includes most of the text-books used by the students. Each student is permitted to have out five books at once during term-time.) The fine collection of French, English, and Dutch books has been ordered to be sold. Translations of hand-books on practice, on therapeutics, on the eye and ear, on the throat, on venereal diseases, and on surgery, have been made into the Japanese-Chinese characters used by the educated classes by the native instructors, and are being widely disseminated. Upwards of fourteen thousand copies of the Japanese edition of the lecture-notes of the professor of therapeutics have already been sold. Hartshorne's "Essentials" and

Wyeth's "Medical Reference-Book," in the character-writing, are having an extensive circulation. Recently the botanical garden of foreign, domestic, and medicinal plants established by the Shogunate more than one hundred years since has been removed to Kaga Yashiki, and is in charge of the professor of materia medica. In his department no text-book is used, the instructions being by lectures and daily demonstrations. The great object sought in this medical school is simplicity of word-instruction, supplemented by repeated demonstrations of the varied applications of instruments, movements, and apparatus, and the preparation and uses for the different drugs.

As stated in a former letter, there has been added to the medical school a department in which all instruction is in Japanese and all the instructors gentlemen who have studied Western medicine. The course of study is four years, of which two years are devoted exclusively to therapeutics and clinical work. Persons upwards of twenty years of age and possessing a sound Japanese and Chinese education can enter the school. The examinations are annual, and two consecutive failures are followed by expulsion. Graduates are given a government permit to practise medicine in any part of the empire and relieving them from future *ken* (provincial) examinations.

According to the last report of the I-Gaku-Bu, there were 111 German instructors and 33 natives. Of students in the special or advanced course there are 39 public cadets (all expenses being paid by the government, as in the naval and military school), 59 *shikuse* (students who are in the future to refund the government the funds advanced for their education), and 36 private students; in the preparatory department, 161; in the Japanese, 656; and in the therapeutic class (made up of practitioners of the "Chinese school" who desire to learn of Western methods and drugs), 82,—a total of 1033. The tuition is free, except in the two latter-mentioned departments, of which the fee is one dollar per month. Board, rooms, charcoal, and necessary expenses in the student-quarter amount to less than seven dollars per month. The school is in session about nine months. Regular attendance and continued advancement are demanded of all in the school.

The first class in the special course

graduated in 1878, but the graduates did not receive their degrees until 1879. The class numbered twenty; of these, two were retained at the college; four were sent to Germany for advanced study at government expense; a few entered the army medical service; and the remainder were sent to hospitals in various parts of Dai Nippon. In 1879, I suppose about the same number graduated, there being twenty-five in the second class of 1878. The army is prepared to take ten graduates per year, and the navy as many more, when the home department sees fit to relieve them from its service. Their salaries are from 100 to 175 yen per month, according to the position to which they are assigned. The ordinary army surgeon receives fifty yen per month; the assistant, thirty yen. In the civil service not only is the salary more, but the status of the medical staff is far better.

J. C. CUTTER, M.D. Harv.,
Physician to Kaitakushi.

LAFORO, JAPAN, June 21, 1880.

CORRESPONDENCE.

LONDON LETTER.

THE great event in medicine of the past month has been the Forty-Eighth Annual Meeting of the British Medical Association at Cambridge. It met there in 1866; so this is its second visit to the Eastern university town. Cambridge looked lovely in the brilliant sunshine, the heat being tempered by a breeze from the northeast; so that it was not oppressively hot, as it otherwise would have been. Of course, too, it was also an attractive place, and consequently there was a very large gathering. The in-coming president, Professor G. M. Humphrey, delivered an address at the first general meeting, in which he traced the history of medicine in the University of Cambridge, and pointed to its present flourishing condition. A noble block of buildings, which furnished space, if not quite ample space, for the large attendance on the different section-meetings, and for experiments, etc., testified to the vitality of medicine there, proving quite a contrast with its position in the sister university of Oxford. It is a well-known fact that, under Professor Michael Foster, physiological research is flourishing famously at Cambridge, and he is well supported by Professor Humphrey; so that there is quite a band of workers established there. Thus, we can boast of one good physiological school in our universities. The meeting was amused by a prominent medical member of the teetotal party moving that in the future the dinner-tickets should not include wine; but, as

the motion did not affect the present dinner, the matter was referred to the council. It is a little matter, but it shows that this active party misses no opportunity of pushing its views before the public.

Next morning the address on Medicine was delivered by Dr. J. J. Bradbury Linacre, Lecturer on Physic at Cambridge, on "Modern Scientific Medicine," in which he ably reviewed what was now being done with instruments of precision. It was an able *résumé*, very creditable to the speaker, who is a comparatively young man of promise. The next thing was the conferring of the honorary degree of LL.D. upon a number of distinguished persons. This ceremony is one in which the undergraduates feel themselves bound to take much interest and to express their opinions with much freedom. Though it is the "long vacation," a large number of men remained "up" working at their different subjects; consequently there was a large crowd of them in the Senate-House on this occasion. The gentlemen selected for the honor were Brown-Séquard; Donders, of Utrecht; Gross, of Philadelphia; Sir W. Jenner; Sir William Gull; Sir George Burrows; W. Bowman, the ophthalmic surgeon; the Rev. Samuel Houghton ("the cleverest man in Ireland"); the ex-President, Dr. O'Connor, of Cork; Lister, of antiseptic fame; John Simon, C.B.; and Andrew Wood, of Edinburgh.

All went well and smooth enough, with the usual amount of jest and comment, except when Sir William Gull's turn came; then there was a "proper shine." How the undergraduates became acquainted with the said baronet's recent conduct it is impossible to say, but their condemnation was certainly emphatic. Sir William Gull has taken upon himself to act very strangely at times, and not only to ignore the opinions of other members of the profession, but even openly to flout them. When the ex-Emperor Napoleon died at Chiselhurst, Sir William Gull chose to dissent from the views of the other eminent medical men present, and expressed an individual opinion of his own about the cause of death, though he would never give to the world any exposition of it, even when challenged to do so by the late emperor's Parisian medical attendants. Then in the notorious "Bravo" poisoning case his conduct towards Professor George Johnson, of King's College, was such that it was brought before the College of Physicians, and, whatever happened in their committee, his conduct was unquestionably condemned by the profession generally. Then in this recent row at Guy's Hospital he has figured very badly. A nurse under the new régime was recently tried for the manslaughter of a patient and condemned to three months' imprisonment. This patient, according to Dr. Pavy, whose work on Food is so well known, suffered from pulmonary phthisis, and he gave evidence accordingly.

This patient, unfortunately, soiled her bed, and for this she was punished, as well as cleaned, by being put into a bath with much harshness by the nurse, without medical authority, and left there for a considerable time. After this the patient got rapidly worse, and died. The verdict and the sentence testify to the opinion of the jury as to the treatment she received. When the nurse was tried, who should voluntarily appear for the defence but the well-known baronet, who is the Senior Consulting Physician to Guy's Hospital, on which pretext in the witness-box he chose to air his views on the subject of tubercular disease of the brain, of which, in his opinion, the woman died, the bath exercising no influence over the necessarily fatal result. This last outrage brought down on him swift punishment. Howls, shrieks of derision, shouts of "Pavy!" met him in one continuous roar, till the place was a perfect Pandemonium. Of course, the students were set on by the members of the profession, and the few and feeble protests of those who dissented from the general opinion were lost in the din of the majority. So long and so vigorous was the condemnation of the baronet that the scene became very trying to the spectators, whatever may have been the subjective sensations of the object of their indignation. Such a reception has never been given to any one else in the memory of man, and will never be forgotten by any one present. It is to be hoped that the conduct which provoked it will not be repeated. Even a fashionable medical baronet cannot do just entirely as he likes without being brought before the tribunal of medical and public opinion sooner or later. This was the only unpleasant event which marred the harmony of the meeting, which, on the whole, was a great success.

Then came the inspection of the museum and the exhibited objects,—instruments, new preparations, inventions of various kinds, and last, and not least in that hot August weather, an unlimited supply of that delightful non-alcoholic drink, *zædone*. The spirited proprietors of this beverage took this opportunity of advertising their product, and, the weather proving a valuable ally, their success was complete as regards inducing the different members to taste and retaste the sparkling drink.

At two in the afternoon the different sections set to work in good earnest. It would be impossible to give any account of the different papers read. One of the most interesting communications made was the combined work of Professor Ferrier and Professor Gerald Yeo, of King's College, on "Surgical Injuries to the Brain treated Antiseptically." Their results are most valuable. Under this plan of treatment the injuries inflicted—*i.e.*, excisions of various portions of the cortical portion of the brain—healed up most kindly. The animals were then carefully observed for

months after. When the time came to examine the brains the wounds were found to have healed with the most gratifying freedom from any inflammatory extension of the injury, the photographs showing the sharpest outlines of the original injury; consequently the precise results of the lesions could be gauged without complications from subsequent inflammation obscuring them. The results attained, I understand, will do much to clear away difficulties which exist at present, and to harmonize the conflicting views of different observers. Then there was a discussion on hysterical anæsthesia, on which there were some considerable differences of opinion expressed, as might be expected. There was also a discussion on the effects of alcohol in the causation of insanity, inherited and other. Then there was a discussion on the seat of the formation of urea in the body. In the surgical section the treatment of wounds was discussed, Professor Lister being to the front.

On the Thursday Professor Preyer, of Jena, commenced a discussion on "Sleep and Hypnotism," which was certainly interesting. A section on Ophthalmology and a sub-section on Otology did good work. Dr. Swanzy had some Holmgren's skeins of different-colored wools, and a very large number of men had their vision tested for color-blindness. Having distinguished or failed to distinguish the various colors and shades of color, and then being told that was enough, a number growled at nothing more being done. They failed to see that the object of Dr. Swanzy was merely to ascertain the fact of what proportion of educated men, who were not merely "color-stupid," were actually "color-blind" when tested by these skeins.

Friday was opened by an address delivered in the physiological section by Professor M. Foster. It was listened to with rapt attention. The practical line he took was similar to that taken by Henry Power at the Cork meeting last year, *viz.*, that a knowledge of physiology is of the highest practical value to a medical man in his every-day walk in life. His anatomical knowledge is useful to him frequently, but physiological knowledge will stand him in good stead several times in every working day of his life. It is only reiterated expressions of individual opinion which can reach public opinion, and the profession are slow to take up these, to most of them, novel views, entailing their forsaking a lot they think they know, and taking up a new study the difficulties of which at the outset they keenly appreciate, but whose practical, ultimate value does not loom up very distinctly in the distance to their vision. Yet, the longer one lives, the more the number of cases troublesome to manage from impaired assimilation that come before one's notice, the more one sees of intercurrent disturbances of digestion in the course of disease, acute or chronic, and the more one feels the need for

advanced physiological information. The appreciation of Professor Foster's address demonstrates that a large proportion of the profession are waking up to the importance of the subject, and in time a great change will be wrought.

Then there were, of course, the different meetings of the various committees, which, if not of general interest, certainly are a god-send to a number of enthusiasts and busy-bodies, who blow off steam, and so relieve themselves on their pet hobbies, annually, even if their work does not produce that far-reaching influence they aspire to create.

Finally, there were the entertainments of various kinds. As the colleges were largely empty, they put a number of their spare rooms at the disposal of their authorities, and a number of us had an experience of the life of an undergraduate. We breakfasted "in hall" in the college dining-room; then we dined "in hall" and had dessert and wine in "the combination-room;" after which one conspicuous member of the profession committed the enormity of lighting up a cigar and marching over the grassy plot of the quadrangle, innocent of his offence, and setting a bad example to all the undergraduates, for which he was properly censured after being allowed to commit the offence. We learned to comprehend practically the phrase of "sporting one's oak,"—that is, locking the stout oaken door which protects the industrious student from invasion when he wants to be undisturbed. We became familiar with that proper dame "the bed-maker," and that useful attendant locally known as a "gyp," and with "the buttery," whence eatables and drinkables are furnished. There is a venerable sense of respect for the past—a social conservatism—quite pleasant in these old buildings. The old man who presided over the buttery of Corpus College had been born within its precincts, and, man and boy, been there one-and-sixty years, and was distinctly in good preservation. The cloacal arrangements were distinctly mediæval, and among the students of old disturbances of the bowels, so common amidst the degenerate persons of the present generation, must have been unfrequent or even unknown. The fine weather made these arrangements less irksome than they would otherwise have been had we had wet nights.

The general entertainments were splendid, and were the source of favorable comment from everybody. On Wednesday evening the soirée of the President and the Reception Committee was held in the grounds of the Fitzwilliam Museum, and was largely attended. The museum itself was lighted up with the electric light, while the garden-walks were hung with Chinese and Japanese lanterns. On the Thursday was held the annual dinner, with the usual laudatory speeches after it. This year the room would hold only a certain

number, and it seems to have been well served: so there was less than the usual amount of grumbling. On Friday afternoon a garden-party was held in the Fellows' garden of King's College. This garden is beautifully situated to the west of the Cam, which river runs through the grounds of several of the colleges. It was a beautiful retired spot, the very *beau-ideal* of a garden in which to hold a party. Some excellent music made it all the more attractive to most people, and all seemed to enjoy themselves thoroughly. Certainly, a garden-party is a capital institution, especially in the magnificent weather which favored the gathering. The whole concluded with a soirée in the grounds of St. John's College in the evening. This was the crowning feat of all. The moon shone brightly over a thick belt of trees; long walks were hung with every variety of paper lantern, of every shape and hue; the evening was balmy, while a pleasant breeze relieved all from any sense of oppression; amidst the strains of music were heard voices in the distance. Slowly came in sight along the Cam a barge hung with pennons and streamers, illumined with paper lanterns, and containing a number of songsters, who sang glees. The whole formed a scene of magic beauty, and will never be forgotten by those who were fortunate enough to be spectators thereof.

Such, then, was the finish of our round of entertainments, and next morning all were bustling about, either going on some of the excursions or hastening back to town to take their wives and families to the sea-side.

These annual meetings, so largely attended, are very useful for the spread of professional information, bringing a lot of men in the country in contact with the most recent information, and also for welding the profession together socially. Men from personal knowledge learn to have confidence in other men living far away; and the Association is beginning to have a collective voice, which must be listened to after a time by our legislators, and which will counteract those unfortunate impressions made by the misconduct of individuals, which has done so much to keep down the status of the profession and to forfeit that respect which, as a whole, it deserves. Individual laches will be lost in an aggregate of social respectability, and the Association will win for the profession a position more or less commensurate with its deserts.

J. MILNER FOTHERGILL.

COMPOUND TINCTURE OF BENZOIN IN COMPOUND FRACTURES.—Mr. Fergus M. Brown recommends this treatment in a recent number of the *Lancet*. After cleansing the wound and removing splinters, etc., he places compresses of lint saturated with the tincture over the opening, and finds healing take place without suppuration.

REVIEWS AND BOOK NOTICES.

A TREATISE ON COMMON FORMS OF FUNCTIONAL NERVOUS DISEASES. By L. PUTZEL, M.D. New York, William Wood & Co., 1880.

The impression made upon us by this book is that it is one of a class written to the order of publishers for the purpose of filling out a medical list. By this we do not mean to disparage the work, as it is perfectly within the scope of possibilities for a publisher to select wisely as to the author. Clear, concise, well written, and well up to the science of the day the work certainly is, even if it do not contain much that is novel or that offers a distinct *raison d'être*. Few persons, we think, could imagine its scope from its title: it treats solely of chorea, neuralgia, and peripheral palsies. The reasoning which excludes hysteria from functional nervous diseases, to give place to peripheral palsies from traumatism, neuromatas, neuritis, etc., is one too subtle for the comprehension of a plain reviewer whose near approach to forty years of age entitles him to rank among the old fogies.

GLEANINGS FROM EXCHANGES.

COTTON-WOOL AS A VEHICLE FOR MEDICATING THE NASAL REGION.—Dr. Edward Woakes (*Lancet*, vol. i., 1880, p. 876) says that the numerous washes, lotions, vapors, etc., which have been recommended as a means of applying medicaments to the post-nasal region are so temporary in their action as to effect little more than a cleansing and disinfecting influence. Irrigation, however, in one or another of its forms, will always play an indispensable part in the treatment of nasal and post-nasal diseases, for until incrustations and decomposing accumulations of mucus have been removed through its agency, little result would follow from more permanent applications.

Attempts have been made to overcome the difficulty of topically medicating these regions by mixing the drugs selected for the purpose with a gelatin basis and introducing these in the form of conically-shaped bougies. Patients using them complain of the annoyance caused by their undergoing solution and trickling down the pharynx, producing cough and disturbance of rest. Nevertheless they have served a good purpose. The insufflation of powders or medicated snuffs is sometimes adopted, but practically all these measures are insufficient for the purposes in view.

About three years ago Dr. Woakes devised pellets of cotton-wool impregnated with iodoform and introduced through the anterior nares. This mode of introducing the drug proved so satisfactory that he has recently adopted the method of diffusing a number of

other drugs through cotton-wool for use in the nasal and post-nasal regions. The method used is as follows. A quantity of wool, usually from two to three grains by weight, is twisted spindle-shape, but loosely, upon a piece of thread or silk; the thin ends are brought together and tied with a knot; thus the spindle-shaped pledget of wool is doubled upon itself and secured firmly to the thread, having now a pear shape, the stalk being represented by the thread. A blunt probe is engaged in the wool and made to conduct it along the floor of the nose to the spot where it is to be retained. The process is to be repeated on the other side, and the threads which hang out are tied together. If desired, several such pledgets can be introduced together and the threads tied to one another. Irrespective of the special virtue of the drug employed, this use of medicated cotton-wool has the advantages of absorbing discharges and also acting favorably by exerting pressure on the mucous membrane over the turbinated bones, when this is puffy, œdematous, and swollen. Besides the iodoform wool, Dr. Woakes gives the following formulæ:

ASTRINGENTS.—*Perchloride of Iron Wool*.—Cotton-wool, 3i; glycerin, ℥x; tinct. ferri chlor., f3i.

Tannin Wool.—Cotton-wool, 3i; glycerin, ℥x; tannin, 3i; alcohol, f3vi.

Alum Wool.—Cotton-wool, 3i; glycerin, ℥x; alum, 3ss; water, f3i.

Rhatany-Kino-Catechu Wool.—Cotton-wool, 3i; glycerin, ℥x; tinct. catechu, vel kino, vel rhatany, f3i.

Hamamelis Wool.—Cotton-wool, 3i; glycerin, ℥x; tinct. hamamelis, f3ss.

ANTI-CATARRHAL.—*Cubebæ Wool*.—Cotton-wool, 3i; glycerin, ℥x; tinct. cubebæ, f3i.

ANTISEPTIC, DISINFECTANT, AND STIMULANT.—*Camphor Wool*.—Cotton-wool, 3i; glycerin, ℥x; tinct. camphoræ, f3i.

Boric or Boracic Wool.—Cotton-wool, 3i; glycerin, ℥x; boric acid, 3i; alcoholis, f3vi.

Iodine Wool.—Cotton-wool, 3i; glycerin, ℥x; tinct. iodine, f3ss.

SEDATIVE.—*Opium Wool*.—Cotton-wool, 3i; glycerin, ℥x; tinct. opii, f3ss.

General Directions.—Mix the glycerin with the tincture or other solvent, saturate the wool with the liquid, and dry.

A FŒTUS IN ADIPOCERE.—Of the many brilliant and rare operations that Billroth has performed this winter, one or two especially deserve more than passing notice. The first was the removal of the fruit of an extra-uterine pregnancy, which, as the result showed, had been converted into a perfect adipocere, while still retaining quite distinctly the outline of every part and feature. The woman—a multipara—had, two years before the operation, presented symptoms which induced the physicians in charge to diagnose an extra-uterine pregnancy,—a diagnosis confirmed by Professor Braun, of the obstetric depart-

ment of the university. Not satisfied with either of these answers, she left Vienna, and was not again heard from until recently, when she presented herself at the surgical clinic and demanded to have the tumor removed, as the sense of weight, pain, and disturbances of digestion from which she suffered had made her life a burden; in addition, she had had repeated attacks of peritonitis. As she persisted in this demand, despite a most unfavorable prognosis, the operation was finally decided upon, and a confirmation of the previous diagnosis made two years before was the result. As is easily imagined, the adhesions of the sac containing the degenerated foetus to surrounding viscera were very extensive, and quite a number of ligatures had to be applied; the hemorrhage was slight and quickly controlled, and the sac removed *in toto*. It was composed of dense fibrous tissue, doubtless the result of an inflammation, and upon its inner surface contained an abundance of cholesterol crystals, with a thin coating of the same yellowish, fatty material into which the foetus had become converted. Of the foetus itself the soft parts had all undergone this change, and many of the bones, particularly at their epiphyses, were similarly affected. The woman had no fever, and did very well after the operation. The foetus, very well preserved, had, to judge from its size, evidently reached maturity before its death and subsequent degeneration; probably had it remained longer in the abdominal cavity it would have become infiltrated with calcareous salts and resulted in the formation of a perfect so-called stone child, or lithopædion. The rarity of such cases of extra-uterine pregnancy in and of themselves, the history of the subsequent operation, and the conditions there found, attach to this case quite a peculiar interest. The patient has been very well up to date.—*Corr. Cin. Lancet and Clinic*; from *Canada Medical and Surgical Journal*.

TREATMENT OF HEMORRHOIDS BY CRUSHING.—Mr. George Pollock (*Lancet*, vol. ii., 1880, p. 1) has long thought that the operation of treating hemorrhoids by ligature or by clamp and actual cautery is usually followed by much more pain than should necessarily be attendant on measures adopted to relieve successfully a patient suffering from piles. The ligature, however skilfully and carefully applied, destroys the life of the part by degrees only; the portion in its grip does not die instantaneously, and, consequently, must naturally be a source of more or less suffering till the death of the part is effected. Its application is very often followed by very great pain, never without some, and often accompanied by severe, spasm of the sphincter.

The more recently adopted method of treatment by clamp, scissors, and actual cautery, though perhaps somewhat less painful, is still sufficiently severe to occasion much subse-

quent suffering, and often for some days. A burnt wound must in most cases be attended with more heat, pain, and discomfort than a clean-cut surface; œdema, retention of urine, spasm of sphincter, bearing-down pain in the rectum, are all more or less the common accompaniment of both of these methods of treatment.

It must be said, however, that Mr. Curling, who has had perhaps a larger experience than any one, is in favor of the ligature. After a lengthened experience, he has had, with one exception, no fatal case from ligature. Ligature, Mr. Curling admits, is more tedious than the cautery, but is less alarming to the patient, and less likely to be followed by hemorrhage.

It has occurred to Mr. Pollock that if a pile could be rapidly and effectually destroyed at its base by some instrument the action of which would be analogous to that of crushing the part included in its bite, the vessels of the crushed portion would not be very liable to bleed when the surface of the pile was removed, and, the nerves being bruised by this proceeding, it would be less liable to be followed by pain.

Mr. Pollock's first attempts at this operation were attended at times by hemorrhage, but he has now devised an instrument which does away with the danger of this complication. In comparison with the other operations this is almost painless; pain has been felt in one or two cases for a few hours, but usually there is none.

The process of the application of the clamp (the instrument is figured in Mr. Pollock's paper) is as follows. The patient suffering from hemorrhoids, being prepared for the operation in the usual manner, is placed under the influence of ether. He is then turned on his left side; the right leg is well flexed, and fixed with a strap, which is carried under the knee and around the neck. The pile to be removed is drawn well down by a prolonged hook or forceps. The clamp is then to be applied to the base of the pile, and at once tightly and firmly closed by the action of a screw at the end of the handles. The portion of pile which protrudes *inside* the lips of the clamp is then to be removed by a pair of curved scissors. The clamp may afterwards be retained, still grasping the stump of the pile, for any time the operator may think desirable. Mr. Pollock's usual custom is to retain it from half a minute to a minute. If the pile be large and thick, it may be well to retain it for a rather longer period. This process is, of course, to be repeated according to the number of masses to be got rid of. If there is any bleeding at all, ligatures are to be applied; they do not at this time cause pain.

EXCISION OF THE THYROID.—M. Tillaux reports a case of successful excision of the thyroid for goitre believed to be of the "ex-

ophthalmic" form. The patient was a woman 29 years of age, and the thyroid was enlarged to the size of the fetal head at full time. In the operation Lister's antiseptic method was strictly observed. An oblique incision was made from above downwards parallel to the anterior border of the sterno-mastoid, and then a horizontal incision perpendicular to the other. On reaching the thyroid M. Til-laux endeavored to separate the capsule, but found great difficulty in doing so, each movement of the grooved director causing a jet of blood. The capsule adhered so firmly to the thyroid that it was necessary to apply more than fifty hæmostatic forceps to restrain the hemorrhage. Relinquishing the attempt to attach the right lobe of the tumor, he made a second oblique incision parallel to the first on the left side, and obtained thus a flap, which he raised over the chin. There were no adhesions on this side, and the thyroid body was enucleated without difficulty. The bleeding points were secured. It was noticed that when the trachea was exposed, after the removal of the mass, there was great difficulty of breathing, but as soon as the flap was replaced and the trachea covered the dyspnoea at once ceased. A drainage-tube was placed on the lower extremity of the wound. For four days all went on well. On the fifth there was free hemorrhage from the left crico-thyroid artery, from which the suture had escaped, but it was arrested without difficulty. From the time of the operation the woman had not a single attack of suppuration; the other phenomena also disappeared, and the woman made a good recovery.—*Lancet*, vol. i., 1880, p. 1008.

SUBPHRENIC PYO-PNEUMOTHORAX AND ABSCESSSES.—Under the name of subphrenic pyo-pneumothorax Dr. E. Leyden describes, in the *Zeitschr. f. Klin. Med. (Brit. Med. Jour., vol. i., 1880, p. 891)*, cavities full of air and pus formed beneath the diaphragm, and extending more or less into the thoracic cavity so as to produce physical signs very closely resembling those of genuine pyo-pneumothorax. These abscesses may be found either on the right or on the left side. The mechanism of the origin of these air-containing, suppurating cavities is closely connected with a history of perforative peritonitis; they are most frequently the result of perforating ulcers of the stomach or duodenum. Their tendency when left to themselves is, almost without exception, towards death. It appears that they most frequently perforate the lung; but they may discharge in other ways. Perforation of the stomach or of the transverse colon may end favorably. Dr. Leyden's observations have shown him that the diagnosis of subphrenic pyo-pneumothorax may generally be made with certainty, and the diagnosis is of great importance, as life may be saved by operation.

The following are, according to Leyden,

the diagnostic characters of subphrenic pyo-pneumothorax:

1. The development of the disease is preceded by symptoms of general (perforative) peritonitis or discharges of pus by the bowel.

2. An exudation takes place in the lower part of the thorax (right or left), with symptoms of inflammation, cough and expectoration being absent,—at least, for a long time.

3. There are distinct symptoms of pyo-pneumothorax in the lower part of the chest, viz., complete resonance on percussion as far as the border of the ribs, and dulness in the lower and posterior part; in this region the respiratory murmur and vocal fremitus are absent, and metallic tinkling is heard on simultaneous auscultation and percussion; the succussion-sound is distinct.

4. At the same time, examination shows that the lung above is unaffected, and that it descends during deep inspiration. Beneath the clavicle there is vesicular respiratory murmur, and the vocal fremitus reaches as far down as the third or fourth rib. On deeper inspiration, however, the normal respiratory murmur is heard as low down as the fourth or fifth rib, while, at the same time, all respiratory sound is sharply cut off below this limit.

5. The dulness on percussion, corresponding to the exudation, is rapidly and distinctly altered by changes in the position of the body, but the change is limited to the lower part of the chest (*i.e.*, beneath the diaphragm).

6. The signs of increased pressure in the pleural cavity are either absent or very indistinct. The corresponding half of the thorax is scarcely distended; the heart is but little pushed aside. On the other hand, the liver reaches as low down as the umbilicus, or even lower.

7. In the further progress of the case, any doubt that may have existed as to the diagnosis may be removed by the sudden and abundant expectoration of ichorous pus, indicating perforation into the air-passages.

8. Finally, the diagnosis may be confirmed by manometric examination of the pleura. Pfuhl had already remarked that in puncture combined with the use of the manometer, when the canula is in a cavity beneath the diaphragm, inspiration is attended with an increase and expiration with a diminution of pressure, being the reverse of what occurs when the canula lies in the pleura.

THE CROTON OIL TREATMENT OF RING-WORM.—Dr. Alder Smith (*Brit. Med. Jour., vol. i., 1880, p. 885*) strongly recommends the production of an artificial kerion by croton oil, *i.e.*, that swollen, raised, inflamed, and infiltrated state of the scalp which sometimes accidentally occurs during treatment, and which always results in a speedy cure of the disease. Kerion should be produced, if possible, in old, chronic, small patches of ring-worm that have resisted all other treatment

for many months, but not in those cases where the disease extends over a large surface.

The great aim of this treatment is to cause inflammatory swelling and effusion into the tissues around the follicles, so that the stumps, which otherwise would break off on attempted epilation, will now come out with the discharge or can easily be extracted; in fact, very often in a short time an inveterate patch of ringworm that has withstood every other treatment for years can be transformed into a smooth, slightly-raised place, utterly destitute of all hair and stumps, and practically well. Even if the swollen condition of kerion cannot be produced, this treatment very rarely fails in loosening the stumps and curing the disease.

Ringworm must never be considered cured—although the hair has grown again on the patches—as long as a single stump remains affected with the fungus or any black dots are seen. These black dots are the orifices of diseased follicles in which the stumps have been broken off on a level with the surface of the scalp by friction, or are the apertures filled with dirt left by the retraction of the broken and shortened stump into the follicle after attempted epilation.

It is most difficult to certify that any given case of ringworm is absolutely well. Time after time stumps that were not visible at one examination will crop up again, breaking off when any attempt is made to extract them, and reappearing again for months after the case in other respects seems cured. Nor must it be forgotten that stumps are not removed when they only break off, and that no reliance for diagnosis or prognosis can be placed on the microscopic examinations of short, ordinary hairs taken from a patch, but only of the stumps.

In conclusion, Dr. Smith warns medical men not to apply croton oil in ordinary cases of ringworm. The pustular eruption frightens parents, and causes them to imagine the doctor has made the disease worse. He always explains to parents beforehand the reasons for adopting this treatment and the results to be expected from it. It is important to bear in mind that simple remedies will generally suffice in children, and that stronger ones in such cases should never be employed.

ARREST OF HEMORRHAGE DURING AMPUTATION AT THE HIP-JOINT.—Dr. Rickman J. Goodlee writes to the *Lancet* of July 3, recommending an application of Esmarch's bandage to the arrest of hemorrhage in amputation at the hip-joint. The limb having been rendered bloodless by elevation, the rubber band is placed loosely in the perineum, after slipping it through two loops of bandage (one in front and one behind), which are drawn across to opposite sides of the body and held firmly above the iliac crest by an assistant. The two ends of the rubber band are then drawn rapidly and tightly outwards,

are crossed below the iliac crest of the side on which the amputation is to be performed, and are then made to encircle the pelvis once, passing on the opposite side between the iliac crest and the great trochanter. The arrangement is shown in an accompanying sketch. This method has the advantage of compressing the vessels of the posterior flap as well as the commencement of the common femoral, and in the case of a boy operated upon by Dr. Goodlee it enabled him to perform the oval amputation quite bloodlessly and as slowly as was desired. As the band does not pass round the waist, no fear need be entertained of its interfering with respiration.

GLYCERIN IN FLATULENCE, ACIDITY, AND PYROSIS.—Drs. Ringer and Murrell (*Lancet*, vol. ii., 1880, p. 6) have largely employed glycerin, and find it very useful not only in acidity, but also in flatulence and pyrosis, and that it sometimes relieves pain. Cases are met with where flatulence, or acidity, or pyrosis is the only symptom; but more frequently these symptoms are combined. Some patients "rift up" huge quantities of wind without any other symptom than depression of spirits; in others we get flatulence and acidity, one or other predominating; and we meet with others who suffer from acidity, flatulence, and also pyrosis. In all these various forms glycerin is found useful, and in the great majority of cases very useful. It is not invariably useful, and sometimes fails where other remedies succeed; but Drs. Ringer and Murrell strongly recommend its trial. They hardly believe it would influence wind in the colon unless given in large doses. Glycerin does not prevent the digestive action of pepsin and hydrochloric acid: hence, while it prevents the formation of wind and acidity probably by checking fermentation, it in no way hinders digestion. Drs. Ringer and Murrell administer it in doses of a drachm to two drachms, either before, with, or immediately after food. It may be given in water, coffee, tea, or lemon and soda-water. In tea and coffee it may replace sugar,—a substance which greatly favors flatulence, as, indeed, does tea in many cases. In some cases a cure does not occur till the lapse of ten days or a fortnight.

SEBACEOUS CYSTS IN THE SOLE OF THE FOOT.—Dr. Cameron (*Lancet*, vol. i., 1880, p. 1019; from *Indian Med. Gaz.*) gives two cases, the first of a man who showed on the sole an intractable ulcer three-quarters of an inch in diameter, with a red, smooth, and healthy-looking margin, its base covered by a smooth, glistening, secreting surface. It was removed by avulsion, and the ulcer healed quickly. The history was of a small painless swelling in the sole, of its gradual enlargement, of its becoming painful, of its bursting, and, finally, of the formation of the ulcer. The second case complained of lameness, and showed a cyst the size of a marble

in the sole. It was removed by avulsion, and proved to be an ordinary sebaceous cyst.

FRACTURED FEMUR RESULTING FROM MUSCULAR ACTION.—Dr. Clarence Foster (*Lancet*, vol. i., 1880, p. 994) was called to visit a middle-aged gentleman, whom he found, on his arrival, to be suffering from a simple transverse fracture of the left femur at its middle third. As is usual in this accident, there was considerable deformity, rendering the exact nature of the injury at once apparent. On inquiry, it was found that the patient had neither fallen nor in any other way experienced direct violence to the limb, but in walking across the floor he unfortunately made a slight trip, and in endeavoring to maintain his equilibrium the sudden muscular action thereby induced caused the bone to snap asunder. No reason existed for supposing any abnormal condition of the bone itself.

ARSENICAL POISONING THROUGH A GREEN DRESS.—The *Lancet* (vol. i., 1880, p. 815) gives, from a German source, a brief account of a young lady who, after wearing for some time a dark-green (silk?) dress trimmed with light leaves, was attacked by an outbreak of pustules on her neck and arms, which was especially painful at night. After enduring this for a long period, the young lady consulted a physician, who recognized the effect of arsenical poisoning. The dress, on chemical examination, showed a large percentage of arsenic in its material.

CONSTIPATION.—Dr. William Robert Smith (*Lancet*, vol. i., 1880, p. 799) in an obstinate case ordered at first the following pill to be taken every night: Extract of nux vomica, quarter of a grain; ipecacuanha powder, half a grain; aloes and assafetida, five grains. A week or two later this was changed to the following pill, to be taken three times a day: Sulphate of zinc, two grains; extract of nux vomica, half a grain; extract of anemisi, two and a half grains. After a time the dose of this was increased, and the result was highly satisfactory.

MISCELLANY.

THE INTERNATIONAL MEDICAL CONGRESS OF 1881.—A meeting of the Committee of Organization was held at the Royal College of Physicians of London recently, when the date of the congress was definitely settled, viz., from August 3 to 9 inclusive. The meetings will be held in the rooms of the University of London. The following are the sections and office-bearers therein:

President of the Congress, Sir James Paget, Bart., LL.D., D.C.L., F.R.S.

Section I., Anatomy.—President, Professor Flower, F.R.S.

Section II., Physiology.—President, Professor Michael Foster, F.R.S., Cambridge.

Section III., Pathology and Morbid Anatomy.—President, Dr. Samuel Wilks, F.R.S.

Section IV., Medicine.—President, Sir William Gull.

Section V., Surgery.—President, Mr. John Eric Erichsen, F.R.S.

Section VI., Obstetric Medicine and Surgery.—President, Dr. McClintock, LL.D., Dublin.

Section VII., Diseases of Children.—President, Dr. West.

Section VIII., Mental Diseases.—President, Dr. Lockhart Robertson.

Section IX., Ophthalmology.—President, Mr. Bowman, F.R.S.

Section X., Diseases of the Ear.—President, Mr. Dalby, F.R.C.S.

Section XI., Diseases of the Skin.—President, Professor Erasmus Wilson, F.R.S.

Section XII., Diseases of the Teeth.—President, Mr. Edwin Saunders.

Section XIII., State Medicine.—President, Mr. John Simon, C.B., F.R.S.

Section XIV., Military Surgery and Medicine.—President, Surgeon-General Professor Longmore, C.B.

Section XV., Materia Medica and Pharmacology.—President, Professor T. R. Fraser, M.D., F.R.S., Edinburgh.

Invitations to attend the meetings will be issued to all legally-qualified medical practitioners in the United Kingdom, and will be sent to the different countries of Europe, to America, the Colonies, and India. Papers may be read in English, French, or German, and will be published in the volume of Transactions in the language in which they are read.

It will be necessary for all who wish to make communications to the Congress to intimate their intentions to the Hon. Secretary-General, Mr. W. MacCormac, F.R.C.S., 13 Harley Street, London, W., before the end of March, 1881.

HONOR TO DEAD AND LIVING.—At a recent reunion of one of the Kentucky medical associations, reported in the *Louisville Medical Journal*, a speaker, after eulogizing former members, spoke in the following flattering strain of our distinguished fellow-townsmen, Dr. Gross:

"There remains of the list of founders of this society one who was among its earlier presidents. I allude to Dr. Gross,—a name which always brings the glow of pride to the face of a Kentucky physician. See, his footsteps lead him near the limit allotted by the Psalmist to human life. Yet mark him now, erect as in his prime; the light of great deeds resting upon his front; his eyes gleaming with the fire of perennial youth; his hair all blown back, as on, and still on, he presses through fresh fields to win other triumphs. Shall we not pledge him to-night? Shall we not pledge that shadowy host, whose luminous track is seen of us all, that we will strive to make ourselves worthy of the noble heritage

bequeathed us, by seizing the colors which have dropped from their hands as the robes drop from a dead king, and, pressing forward, plant them still farther to the front? Members of the Kentucky State Medical Society, brothers, the answer to these questions rests with each and all of you."

NEW TREATMENT OF GONORRHOEA.—Mr. W. W. Cheyne, believing gonorrhœa to be due to the presence of infective organisms, has been led to try iodoform and oil of eucalyptus. His theory is probably incorrect, but his results seem to have been very good. He employs the remedies in the form of bougies (size of No. 9 catheter) made of iodoform (gr. v), oil of eucalyptus (℥ x), cacao butter (q. s. ad gr. xl).

The method may be summed up as follows. The patient is first told to empty his bladder, partly to clear out his urethra, and partly to prevent the necessity of expelling the antiseptic from the canal for several hours. He then lies down on his back, and a bougie from four to six inches is introduced, and the orifice of the urethra closed by strapping. The bougie ought to be dipped in eucalyptus oil or in carbolic oil (1-20) before insertion. The patient is instructed to refrain from passing water, if possible, for the next four or five hours. If the case be severe and advanced, he takes another bougie home, and is instructed to introduce it in the same manner after he next passes urine. On that evening, or on the following day, he commences the antiseptic injection, which he uses four or five times daily. On the third or fourth day, when the symptoms have entirely subsided, an injection of sulphate of zinc, two grains to the ounce, is begun.

"The specific cause of the disease being eradicated by this means," says Dr. C., "the question of further treatment arises. It seems to me that, although the development of the gonorrhœa is arrested, yet, if the discharge be allowed to become septic and irritating, urethritis might be kept up for some time. I therefore order an injection of boracic lotion (saturated aqueous solution of boracic acid) or an emulsion of eucalyptus oil (one ounce of eucalyptus oil, one ounce of gum acacia, water of twenty or forty ounces) to be used for two or three days. At the end of that time, injections of sulphate of zinc, two grains to the ounce, may be begun. At the same time the great tendency of the urethral mucous membrane, when once inflamed, to remain in a state of inflammation must be kept in mind, and everything which might tend to keep up the inflamed state must be removed. Notably, the patient must be cautioned against drinking, and it is well to order diluents and alkalies."

CINCHONA CONSUMPTION.—Mr. Ferguson, in his Ceylon Directory, estimates the total consumption of cinchona bark for the world at 12,624,000 pounds. A writer in the *Colombo Observer* says, "I do not think I am over-

estimating the number of cinchonas that will be planted in 1880 throughout the island at 20,000,000; allow 5,000,000 for failures and add 5,000,000 for plants planted in previous years and now alive, and it will give you 20,000,000 cinchona-trees, which in five years will yield, either by taking strips and mowing or by the shaving process, about 10,000,000 pounds of dry bark a year." Mr. Ferguson estimates the production of cinchona bark for the world at 13,471,000 pounds, of which Ceylon is put down for 150,000 pounds; "but when," remarks the correspondent referred to, "it produces 10,000,000, as I believe it will in 1885, the total production of the world will exceed the demand of 1876-78 by 10,847,000 pounds. The question therefore arises, Will the demand for cinchona bark in 1885 equal the supply, or will the bark become unsalable except at unfemunerative prices?"—*The Medical Press and Circular*.

VIVISECTION.—The memorial recently presented to Mr. Gladstone, urging him to do all in his power for the absolute abolition of vivisection, was signed by "one hundred representative men," among them Cardinal Manning, Prince Lucien Bonaparte, Alfred Tennyson, Robert Browning, James Anthony Froude, John Ruskin, the head-masters of Rugby, Harrow, and seven other large schools, twenty-one physicians and surgeons, and thirty-seven peers, bishops, and members of Parliament. The memorialists take the ground that vivisection, even with anesthetics, should by law no longer be allowed, and they quote the opinions of Sir William Ferguson, Sir Charles Bell, and Dr. Syme, that "it has been of no use at all, and has led to error as often as truth." They add that the utility, if proved, would not, in this case, excuse the immorality of the practice.

Dr. Leffingwell's paper, "Does Vivisection Pay?" which recently appeared in *Scribner's Monthly*, excited much discussion among London papers.

Dr. Wood has replied to it in the September number of *Scribner*.

PICROPODOPHYLLIN is the name given by Dr. Valerian Podwopotszki to the active principle of *podophyllum peltatum*. He has isolated it from the *podophyllin* of commerce and from the root of the *podophyllum peltatum* as a light, crystallizable, colorless, and exceedingly bitter substance. Experiments upon men as well as animals have proven it to exert in an increased degree the same drastic action as ordinary *podophyllin*. He has chosen the term *picropodophyllin* on account of its excessively bitter taste, and to distinguish it from the *podophyllin* of commerce. His *vorläufige Mittheilung* appears in the *St. Petersburger Med. Wochenschrift*, No. 16, 1880, and he promises some time during the summer to publish an extended account of its chemical properties and pharmacological actions.

TO PREVENT PITTING IN SMALLPOX.—E. Schwimmer has used the following in one hundred and seventy-seven cases with great benefit: Carbolic acid, 4 to 10 parts; olive oil, 40 parts; finely-powdered prepared chalk, 60 parts. The paste was applied on a linen mask.

STEM-PESSARIES.—At a recent meeting of the London Obstetrical Society the condemnation of stem-pessaries seems to have been very general. Mr. K. Thornton, who has had especial opportunities for watching the effects of their use in the most skilful hands, affirms that they do an incalculable amount of mischief. Four or five cases of death resulting from their employment were mentioned.

HONORS TO MEDICAL MEN.—Sir William Gull, of London, and Dr. Samuel D. Gross, of this city, having both received in previous years the degree of D.C.L. from the University of Oxford, have this year been honored by the sister university, Cambridge having conferred upon each of these eminent physicians the highest degree in its gift, that of LL.D.

CHOLERA IN JAPAN.—Sporadic cases of cholera have been reported in Japan from time to time through May and June. About the middle of June it was officially announced that it was prevailing in Kanagawa Ken (Yokohama is in that ken), with a mortality of nearly fifty per cent. It is appearing earlier than in 1879.

DR. TAIT records a case of ovariectomy (*Med. Times and Gaz.*, July, 1880) in which he believes death to have been produced by thymol used after the manner of Lister; also one in which he attributes an almost fatal result to the effects of a five-per-cent. solution of carbolic acid upon the peritoneum.

The French government has allotted to M. Pasteur the sum of 50,000 francs for the purpose of enabling him to carry out his researches on the contagious diseases of animals.

DURING the past summer semester the Berlin University had 3365 matriculates, 504 of which were medical.

DR. BENNET (*Lancet*, August 7) records a case of aortic aneurism treated with galvanism. Result, death.

The will of Dr. Alfred Swayne Taylor, F.R.S., the eminent toxicologist, has been proved under a personality of £60,000.

NOTES AND QUERIES.

NEW YORK, 41 WEST 20TH STREET,
July 31, 1880.

EDITOR OF *Medical Times*,
Philadelphia, Pa.:

DEAR SIR,—Having been selected by the Paris Committee (Messrs. Ranvier and Dumontpallier) having charge of the subscription for a monument or memorial to the late Professor Claude Bernard to represent them in the United States, I beg leave to be allowed to use your columns for the purpose of appealing to the members of the medical profession and all others interested to subscribe to this worthy project.

I need hardly remind your readers of the great debt which every practising physician owes to the labors of the illustrious physiologist whose memory we are asked to honor in this way.

All inquiries and subscriptions, in the shape of bank-checks or postal money-orders, should be addressed to me.

Trusting that I shall have the advantage of your active personal support in this matter, I remain

Yours, very respectfully,
E. C. SEGUIN, M.D.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM AUGUST 22 TO SEPTEMBER 4, 1880.

CAMPBELL, JOHN, LIEUTENANT-COLONEL AND SURGEON, Medical Director, Department of the South.—Granted leave of absence for twenty days. S. O. 103, Department of the South, September 1, 1880.

WHITE, C. B., MAJOR AND SURGEON.—His sick-leave of absence further extended three months on Surgeon's certificate of disability. S. O. 181, A. G. O., August 25, 1880.

HUNTINGTON, D. L., MAJOR AND SURGEON.—To accompany the President and General of the Army to California, Oregon, Washington Territory, Arizona, New Mexico, Colorado, and Kansas, and then return to his station in this city. S. O. 182, A. G. O., August 28, 1880.

CRONKHITE, H. M., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in the Department of the East, and to report in person to the Commanding General, Department of the Platte, for assignment to duty. S. O. 158, A. G. O., September 1, 1880.

KING, WILLIAM H., CAPTAIN AND ASSISTANT-SURGEON.—His sick-leave granted him July 21, 1880, from Headquarters, Department of Dakota, extended three months on Surgeon's certificate of disability. S. O. 183, A. G. O., August 30, 1880.

HARVEY, P. F., CAPTAIN AND ASSISTANT-SURGEON.—At expiration of his present leave of absence, to report in person to the Commanding General, Department of Dakota, for assignment to duty. S. O. 182, c. s., A. G. O.

AINSWORTH, F. C., CAPTAIN AND ASSISTANT-SURGEON.—When relieved, to comply with S. O. 89, c. s., A. G. O., in his case. S. O. 100, Department of Arizona, August 10, 1880.

SKINNER, J. O., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Whipple Barracks, A. T., relieving Assistant-Surgeon Ainsworth. S. O. 100, c. s., Department of Arizona.

WORTHINGTON, J. C., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of Arizona, to proceed to Baltimore, Md., and, on arrival, report by letter to the Surgeon-General. S. O. 182, c. s., A. G. O.

COMEGYS, E. T., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for four months. S. O. 181, c. s., A. G. O.

REED, WALTER, CAPTAIN AND ASSISTANT-SURGEON.—To report in person to the Commanding General, Department of the East, for assignment to duty. S. O. 182, c. s., A. G. O.

BURTON, H. G., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty in Department of Arizona, to proceed to Boston, Mass., and report arrival there by letter to the Surgeon-General. S. O. 182, c. s., A. G. O.

POWELL, J. L., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Granted leave of absence for twenty days, with permission to leave the Department and apply for ten days' extension, provided he furnish an acceptable substitute, without expense to the United States, during his absence. S. O. 167, Department of Texas, August 19, 1880.

EBERT, R. G., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Fort Walla Walla, W. T. S. O. 140, Department of the Columbia, August 16, 1880.